

CLAIMS:

1. A crop harvesting header comprising:

a main frame structure extending across between two ends of the header across a width of the header for movement in a direction generally at right angles to the width across ground including a crop to be harvested;

a crop receiving table carried on the main frame structure across the width of the header;

a cutter bar across a front of the table carrying a cutter operable for cutting the crop as the header is moved forwardly across the ground for depositing the crop onto the table;

and a crop transport system for moving the cut crop toward a discharge location of the header;

the crop transport system including a crop transport draper having a first end roller, a second end roller parallel to and spaced from the first end roller and a draper canvas wrapped around the rollers for movement around the rollers longitudinally of the canvas in a crop transporting direction;

the draper canvas having on its outer surface a plurality of generally transversely extending longitudinally spaced cleats attached to the outer surface and extending outwardly therefrom for engaging the crop and providing a longitudinal force on the crop;

each cleat comprising a strip of resilient material attached to the outer surface such that the length of the strip is at an angle to a line at right angles to the longitudinal direction so that, as the strip passes around the rollers, one end of the

strip passes around angularly in advance of the other end.

2. The crop harvesting header according to Claim 1 wherein each cleat comprises two strips of resilient material which are arranged at opposite angles to as to converge from outer ends of the strips to an apex substantially on a center
5 line of the draper canvas.

3. The crop harvesting header according to Claim 2 wherein the cleats are arranged on the canvas such that the apex is arranged in advance of the outer ends.

4. The crop harvesting header according to Claim 2 wherein the
10 two strips are separated at the apex so as to leave a portion of the canvas at the center line which is free from the cleat.

5. The crop harvesting header according to Claim 1 wherein each cleat in cross-section is generally rectangular with a height greater than its width.

6. The crop harvesting header according to Claim 1 wherein the
15 angle is less than 15 degrees and preferably of the order of 5 degrees.

7. The crop harvesting header according to Claim 1 wherein the canvas includes at least one end to end connection defined by two end portions of the canvas which are bent outwardly of the draper and connected together by threaded fasteners passing through the end portions to hold them connected and
20 wherein the end portions are arranged at an angle to a line at right angles to the longitudinal direction so that, as the connection passes around the rollers, one end of the connection passes around angularly in advance of the other end.

8. The crop harvesting header according to Claim 7 wherein the

end connection is parallel to the cleats.

9. The crop harvesting header according to Claim 7 wherein the end connection includes a plurality of pairs of separate reinforcing connectors each reinforcing connector having a pair of holes therein engaging onto a pair of the
5 threaded fasteners which hold the pair of reinforcing connectors against the outside surfaces of the end portions, whereby the end connection can flex as it passes around the roller.

10. The crop harvesting header according to Claim 9 wherein each reinforcing connector has a surface facing the roller which is concave so as to match
10 the convex surface of the roller.

11. The crop harvesting header according to Claim 1 wherein at least one of the rollers has an outer diameter less than 2.0 inches.

12. The crop harvesting header according to Claim 1 wherein at least one of the rollers has an outer diameter of the order of 1.5 inches.

15 13. The crop harvesting header according to Claim 1 wherein the crop transport system includes a first side draper having an outer end guide roller at a first end of the header, an inner end guide roller adjacent the discharge location and a continuous draper canvas wrapped around the outer and inner guide rollers to define a top run of the canvas for carrying the cut crop from the knife across the
20 header to a discharge end adjacent the discharge location; and a second side draper having an outer end guide roller at a second end of the header, an inner end guide roller adjacent the discharge location and a continuous draper canvas wrapped around the outer and inner guide rollers to define a top run of the canvas

for carrying the cut crop from the knife across the header to a discharge end adjacent the discharge location; wherein the crop transport draper comprises a feed draper located at the discharge location and including a front guide roller adjacent the cutter bar and a rear guide roller behind the front guide roller and a draper for
5 carrying the crop material rearwardly toward a discharge opening of the header.

14. The crop harvesting header according to Claim 13 wherein the side drapers have a front edge at the cutter bar and the feed draper has a width greater than the spacing between the inner ends of the side drapers so as to extend underneath the inner ends of the side drapers with the front guide roller arranged
10 close to the underside of the side drapers and to the cutter bar and the rear guide roller spaced away from the underside of the side drapers.

15. The crop harvesting header according to Claim 14 wherein the front guide roller has an outer diameter less than 2.0 inches.

16. The crop harvesting header according to Claim 14 wherein the
15 front guide roller has an outer diameter of the order of 1.5 inches.

17. The crop harvesting header according to Claim 13 wherein each cleat comprises two strips of resilient material which are arranged at opposite angles to as to converge from outer ends of the strips to an apex substantially on a center line of the draper canvas.

20 18. The crop harvesting header according to Claim 17 wherein the cleats are arranged on the canvas such that the apex is arranged in advance of the outer ends.

19. The crop harvesting header according to Claim 13 wherein

there is provided a rotary feed member at the discharge location arranged such that the crop is fed underneath the rotary feed member, the rotary feed member being mounted on a mounting assembly for upward and downward movement within the discharge location.

5 20. The crop harvesting header according to Claim 19 wherein the rotary feed member has a length between ends thereof which is less than the spacing between the side drapers; the rotary feed member having each of the ends thereof located inwardly of the respective side draper such that the rotary feed member when moved downwardly on its mounting assembly to a lowermost position
10 has at least part of its periphery between the inner ends of the side drapers and the rotary feed member being arranged to extend to a forward edge at a position forwardly of a rear of the side drapers.

21. A crop harvesting header comprising:

 a main frame structure extending across between two ends of the
15 header across a width of the header for movement in a direction generally at right angles to the width across ground including a crop to be harvested;

 a crop receiving table carried on the main frame structure across the width of the header;

 a cutter bar across a front of the table carrying a cutter operable for
20 cutting the crop as the header is moved forwardly across the ground for depositing the crop onto the table;

 and a crop transport system for moving the cut crop toward a discharge location of the header;

the crop transport system including a crop transport draper having a first end roller, a second end roller parallel to and spaced from the first end roller and a draper canvas wrapped around the rollers for movement around the rollers longitudinally of the canvas in a crop transporting direction;

5 wherein the canvas includes at least one end to end connection defined by two end portions of the canvas which are bent outwardly of the draper and connected together by threaded fasteners passing through the end portions to hold them connected and wherein the end portions are arranged at an angle to a line at right angles to the longitudinal direction so that, as the connection passes around
10 the rollers, one end of the connection passes around angularly in advance of the other end.

22. The crop harvesting header according to Claim 21 wherein the end connection includes a plurality of pairs of separate reinforcing connectors each reinforcing connector having a pair of holes therein engaging onto a pair of the
15 threaded fasteners which hold the pair of reinforcing connectors against the outside surfaces of the end portions, whereby the end connection can flex as it passes around the roller.

23. The crop harvesting header according to Claim 21 wherein each reinforcing connector has a surface facing the roller which is concave so as to match
20 the convex surface of the roller.